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Effect of various plant phenols on protein synthesis in excised plant tissues. E. V. Parups, 427.
The influence of tumor growth on the synthesis of α_2-AP (acute phase) globulin of rat serum. H. E. Weimer, C. Humelbaugh, and D. M. Roberts, 1937.
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The effect of phenylalanine analogues on the metabolism of tyrosine in rats. C. Godin and A. T. Gajda, 745.
The proteolytic activity of insulin. M. Pagé and C. Godin, 1329.
The effect of puromycin on the metabolism of phenylalanine in rats. C. Godin, 1961.
Goodfriend, L.
Fractionation on DEAE-Sephadex of normal and A-myeloma human sera. I. Electrophoretic heterogeneity of γA globulins. L. Perelmutter and L. Goodfriend, 203.
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Griffith, T. J.
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Postnatal changes of activity and electrophoretic pattern of jejunal and ileal nonspecific esterase and alkaline phosphatase of the rat. Effect of adrenalectomy. H. Pelichová, O. Koldovský, A. Heringová, V. Jirsová, and J. Kraml, 1375.
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Humelbaugh, C.
The influence of tumor growth on the synthesis of α_2-AP (acute phase) globulin of rat serum. H. E. Weimer, C. Humelbaugh, and D. M. Roberts, 1937.
Hurst, R. O.
A simplified approach to the use of determinants in the calculation of the rate equation for a complex enzyme system. R. O. Hurst, 2015.
Idler, D. R.
The biosynthesis of 11-ketotestosterone and 11β-hydroxytestosterone by Atlantic salmon tissues in vitro. D. R. Idler and H. C. Macnab, 581.
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Purification and properties of fructose diphosphate aldolase from *Fusarium oxysporum* f. *lycopersici*. J. M. Ingram and R. M. Hochster, 929.
Fructose diphosphate aldolase from *Fusarium oxysporum* f. *lycopersici*. II. Characteristics of the exchange reaction. J. M. Ingram, 1505.
Fructose diphosphate aldolase from *Fusarium oxysporum* f. *lycopersici*. III. Studies on the mechanism of reaction. J. M. Ingram, 1909.
Isaacs, W. A.
Hemoglobin G Saskatoon: $\beta^{22\text{Glu}\rightarrow\text{Ala}}$. F. Vella, W. A. Isaacs, and H. Lehmann, 351.
Israel, Y.
Characterization of the esterases from electric tissue of *Electrophorus* by Starch-gel electrophoresis. D. J. Ecobichon and Y. Israel, 1099.
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Purification of CA-7, a thrombolytic fungal protease. D. A. J. Ives and A. L. Tosoni, 1055.

Jackson, L. L.
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Promotion of myopathy by polyunsaturated fatty acids of cod liver oil. K. J. Jenkins and L. M. Ewan, 1873.
Jirsová, V.
Postnatal changes of activity and electrophoretic pattern of jejunal and ileal nonspecific esterase and alkaline phosphatase of the rat. Effect of adrenalectomy. H. Pelichová, O. Koldovský, A. Heringová, V. Jirsová, and J. Kraml, 1375.
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Effect of insulin on the rate of glucose distribution. G. Komaromi, T. R. Csorba, and N. Kalant, 1776.
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Kerr, C. T.
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The effect of structure on nucleoside kinase activity. K. J. Pierre, A. P. Kimball, and G. A. LePage, 1619.
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The effect of feeding frequency on fatty acid composition of rat adipose tissue. T. Braun, M. Kohout, and P. Fábry, 1470.
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Postnatal changes of activity and electrophoretic pattern of jejunal and ileal nonspecific esterase and alkaline phosphatase of the rat. Effect of adrenalectomy. H. Pelichová, O. Koldovský, A. Heringová, V. Jirsová, and J. Kraml, 1375.
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Studies on the conformational changes of mitochondrial malate dehydrogenase in urea–phosphate solutions. R. J. Seguin and G. W. Kosicki, 659.
The effect of lipid micelles on mitochondrial malate dehydrogenase. J. W. Callahan and G. W. Kosicki, 839.
Effect of magnesium ions on coenzyme A and pyrophosphate derivatives inhibition of yeast glucose-6-phosphate dehydrogenase. L. P. K. Lee and G. W. Kosicki, 1279.
Behavior of α-substituted cystines in a cystathionase system and in a pyridoxal phosphate model system. R. J. Thibert, J. F. G. Diederich, and G. W. Kosicki, 1595.

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Postnatal changes of activity and electrophoretic pattern of jejunal and ileal nonspecific esterase and alkaline phosphatase of the rat. Effect of adrenalectomy. H. Pelichová, O. Koldovský, A. Heringová, V. Jirsová, and J. Kraml, 1375.

Kraml, M.
An automated method for following the production of the corticosteroids by adrenal tissue in vitro. M. Saffran, P. Ford, E. K. Matthews, M. Kraml, and L. Garbaczewska, 1901.

Kresack, E. J.
The effects of ions and freeze–thawing on the supernatant and mitochondrial malate dehydrogenase. D. J. Blonde, E. J. Kresack, and G. W. Kosicki, 641.

Krotoski, W. A.
Reduction and alkylation of human plasma orosomucoid in aqueous solution and in 8 *M* urea: a physicochemical and immunochemical study. Human orosomucoid: reduction and alkylation. W. A. Krotoski and H. E. Weimer, 1577.

Kruck, T. P. A.
Separation of Cu(II) – amino acid complexes and evidence for the existence of histidine–Cu(II)–glutamine and histidine–Cu(II)–serine complexes at physiological pH. B. Sarkar and T. P. A. Kruck, 2046.

Kuksis, A.
Excretion of phospholipids by men on fat-free diet. S. S. Ali and A. Kuksis, 689.
Excretion of phospholipids by men on high fat diets. S. S. Ali and A. Kuksis, 703.

Laing, A. C.
Purification and properties of the inducible cholinesterase of *Pseudomonas fluorescens* (Goldstein). A. C. Laing, H. R. Miller, and K. S. Bricknell, 1711.

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Analytical studies of rapidly labeled RNA from L cells. T. Tamaoki and B. G. Lane, 2041.

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1-Aminocyclopentanecarboxylic acid, an inhibitory analogue of methionine in *Escherichia coli*. C. J. Abshire, J. Larouquere, and L. Berlinguet, 557.

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Stabilization of rat liver polyribosomes by endogenous ribonuclease inhibitor. G. R. Lawford and H. Schachter, 144.
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Detection of cells producing antibodies against the dinitrophenyl group. M. N. Layson and A. H. Sehon, 1773.

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Effect of magnesium ions on coenzyme A and pyrophosphate derivatives inhibition of yeast glucose-6-phosphate dehydrogenase. L. P. K. Lee and G. W. Kosicki, 1279.

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Ferrous iron oxidation by *Ferrobacillus ferrooxidans*. Purification and properties of Fe^{++}-cytochrome *c* reductase. G. A. Din, I. Suzuki, and H. Lees, 1523.

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Distribution of tyrosine hydroxylase activity in adult and developing brain. E. G. McGeer, S. Gibson, J. A. Wada, and P. L. McGeer, 1943.
McGeer, P. L.
In vitro screen of inhibitors of rat brain tyrosine hydroxylase. E. G. McGeer and P. L. McGeer, 115.
Some characteristics of brain tyrosine hydroxylase. E. G. McGeer, S. Gibson, P. L. McGeer, 1557.
Distribution of tyrosine hydroxylase activity in adult and developing brain. E. G. McGeer, S. Gibson, J. A. Wada, and P. L. McGeer, 1943.
McGrath, R.
Biosynthesis of chloramphenicol. II. *p*-Aminophenylalanine as a precursor of the *p*-nitrophenylserinol moiety. M. Siddiqueullah, R. McGrath, L. C. Vining, F. Sala, and D. W. S. Westlake, 1881.
McKenna, R. D.
Elastase in normal canine pancreas. M. C. Geokas, R. D. McKenna, and I. T. Beck, 999.
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Purification and properties of the inducible cholinesterase of *Pseudomonas fluorescens* (Goldstein). A. C. Laing, H. R. Miller, and K. S. Bricknell, 1711.
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Studies on the synthesis of plasma glycolipoprotein and hepatic sub-cellular glycoprotein in early choline deficiency. S. Mookerjea, D. Jeng, and J. Black, 825.
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Effects of intravenous administration of adrenocorticotrophin on the adrenal lipids of the rabbit. J. H. Moore, R. C. Noble, and P. N. O'Donoghue, 1335.
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Degradation of aromatic amino acids by fungi. I. Fate of L-phenylalanine in *Schizophyllum commune*. K. Moore and G. H. N. Towers, 1659.
Degradation of aromatic amino acids by fungi. II. Purification and properties of phenylalanine ammonia-lyase from *Ustilago hordei*. P. V. Subba Rao, K. Moore, and G. H. N. Towers, 1863.
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Dehydrogenases during postembryonic development of *Tribolium confusum* Duval (Coleoptera). I. Malate dehydrogenase and malic enzyme in the particulate and soluble fractions. S. Moorjani and A. Lemonde, 1393.
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Stimulation of incorporation of glucosamine-1-^{14}C into rat plasma glycoproteins after renal damage. M. A. Moscarello, L. Sutherland, and S. H. Jackson, 136.
Encephalitogenic activity in mercaptoethanol extracts of myelin. J. A. Lowden, D. D. Wood, and M. A. Moscarello, 148.
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Effect of cobalt ions on myocardial metabolism. G. S. Wiberg, I. C. Munro, and A. B. Morrison, 1219.
A note on the toxicity of 1,2-dichloroethane-extracted fish protein concentrate. I. C. Munro and A. B. Morrison, 1779.
Murray, E. L.
Cell-free incorporation of amino acids by a trout-liver system. Heat-labile aminoacyl transferase activity. L. Rosen, E. L. Murray, and G. D. Novelli, 2005.
Myers, D. K.
Effect of thiol-masking agents on the stromata of rat erythrocytes. R. W. Bide and D. K. Myers, 19.
Effect of X-radiation of the tryptic digestion of albumin and erythrocyte membrane proteins. D. K. Myers, R. W. Bide, and T. A. Tribe, 1973.

Nair, P. P.
Lipids of subcellular particles from bovine heart muscle. I. Fatty acids of neutral lipids. D. J. Nazir, A. P. Alcaraz, and P. P. Nair, 1725.
Lipids of subcellular particles from bovine heart muscle. II. Fatty acids of phospholipids. D. J. Nazir, A. P. Alcaraz, and P. P. Nair, 1739.
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Lipids of subcellular particles from bovine heart muscle. II. Fatty acids of phospholipids. D. J. Nazir, A. P. Alcaraz, and P. P. Nair, 1739.
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Ribonucleic acid fraction obtained from liver ribosomes treated with low levels of ribonuclease. T. K. Nikolov and Ts. Grancharova, 1473.
Noble, R. C.
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The partition of lipids between the yolk and yolk-sac membrane during the development of the chick embryo. R. C. Noble and J. H. Moore, 949.
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Novelli, G. D.
Cell-free incorporation of amino acids by a trout-liver system. Heat-labile aminoacyl transferase activity. L. Rosen, E. L. Murray, and G. D. Novelli, 2005.
Nowaczyski, W.
Procedure for determination of aldosterone in human peripheral plasma by double-isotope derivative assay, and its application for measurement of secretory rate and urinary excretion. W. Nowaczynski, J. Silha, and J. Genest, 1919.
O'Donnell, V. J.
Mechanism of Metopirone inhibition of a soluble adrenal steroid 11β-hydroxylase. D. G. Williamson and V. J. O'Donnell, 153.
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Paterson, A. R. P.
Resistance to purine ribonucleoside analogues in an ascites tumor. I. C. Caldwell, J. F. Henderson, and A. R. P. Paterson, 735.
Paton, D.
The effect of 4-hydroxy-3,5-diidobenzonitrile (ioxynil) on respiratory electron transport in *Vicia faba* L. D. Paton and J. E. Smith, 1891.
Pearce, R. H.
Quantitative isolation of purified acidic glycosaminoglycans from rat skin. R. H. Pearce and J. M. Mathieson, 1565.
Pelichová, H.
Postnatal changes of activity and electrophoretic pattern of jejunal and ileal nonspecific esterase and alakline phosphatase of the rat. Effect of adrenalectomy. H. Pelichová, O. Koldovský, A. Heringová, V. Jirsová, and J. Kraml, 1375.
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The effect of structure on nucleoside kinase activity. K. J. Pierre, A. P. Kimball, and G. A. LePage, 1619.
Pineau, R.
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Polglase, W. J.
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The incorporation of α-glycerophosphate-^{32}P into the lipids of rat brain preparations. I. General properties. F. Possmayer and K. P. Strickland, 53.
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Adenine nucleotides and adenosine triphosphatase activity during aestivation of the Indian apple snail *Pila globosa*. S. Raghupathiramireddy and K. S. Swami, 603.

Raheja, M. C.
Utilization of circulating precursors for the synthesis of testosterone by human testis in vivo. O. J. Lucis, M. C. Raheja, O. Millard, and W. I. Morse, 1213.
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Roberge, A.
Variation of the enzymes of the urea cycle and aspartate transcarbamylase in liver of pregnant rats. A. Roberge, R. Charbonneau, and L. Berlinguet, 1371.
Variation with age of the enzymes of the urea cycle and aspartate transcarbamylase in rat liver. R. Charbonneau, A. Roberge, and L. Berlinguet, 1427.
Roberts, D. M.
The influence of tumor growth on the synthesis of α_2-AP (acute phase) globulin of rat serum. H. E. Weimer, C. Humelbaugh, and D. M. Roberts, 1937.
Roberts, D. W. A.
The wheat leaf phosphatases. VIII. A preparation with phosphotransferase activity. D. W. A. Roberts, 401.
Roberts, J. C.
Effect of temperature on metabolic rates of liver and brown fat homogenates. J. C. Roberts and R. E. Smith, 1763.
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Pulse-height analysis of gamma emissions from ^{99}Mo and ^{99}Tc^{m} in samples of rabbit plasma. G. A. Robinson and A. McCarter, 141.
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Cell-free incorporation of amino acids by a trout-liver system. Heat-labile aminoacyl transferase activity. L. Rosen, E. L. Murray, and G. D. Novelli, 2005.
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Roy, K. L.
The mechanism and specificity of guanine deaminase. J. E. Roy and K. L. Roy, 1263.
Rubinstein, D.
The effect of fasting on the esterification of palmitate by rat epididymal adipose tissue in vitro. A. M. Daniel and D. Rubinstein, 965.
The metabolism of the erythrocyte. XVII. Mechanism of incorporation of adenine into and resultant elevation of ATP and ADP in human erythrocytes. S. V. Manohar, O. F. Denstedt, and D. Rubinstein, 1153.
Saffran, M.
An automated method for following the production of the corticosteroids by adrenal tissue in vitro. M. Saffran, P. Ford, E. K. Matthews, M. Kraml, and L. Garbaczewska, 1901.
St. Angelo, A. J.
Castor bean lipase. Role of the lipid cofactor. R. L. Ory, A. J. St. Angelo, I. V. deGruy, and A. M. Altschul, 1445.
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Sánchez, E.
DDT-induced metabolic changes in rat liver. E. Sánchez, 1809.
Sarfare, P. S.
The denatured states of ribonuclease. II. P. S. Sarfare and C. C. Bigelow, 651.
Sarkar, B.
Separation of Cu(II) – amino acid complexes and evidence for the existence of histidine–Cu(II)–glutamine and histidine–Cu(II)–serine complexes at physiological pH. B. Sarkar and T. P. A. Kruck, 2046.
Sarma, G. R.
Phosphonolipids. XII. Synthesis of phosphonolipid metabolites. L-α-Glyceryl-(2-aminoethyl)phosphonate. E. Baer and G. R. Sarma, 1755.
Phosphonolipids. XIV. Detection and identification of glycerolphosphonolipids in the presence of their phospholipid analogues by paper chromatography of their saponification products. E. Baer, G. R. Sarma, R. Robinson, and P. S. Sastry, 1783.
Sasaki, L.
The antigenic loci of insulin. S. Wilson, M. A. Aprile, and L. Sasaki, 1135.
Sastry, P. S.
Phosphonolipids. XIV. Detection and identification of glycerolphosphonolipids in the presence of their phospholipid analogues by paper chromatography of their saponification products. E. Baer, G. R. Sarma, R. Robinson, and P. S. Sastry, 1783.
Sawas-Dimopoulou, C.
Accumulation des acides aminés libres dans le mésocarpe de l'olive après conservation à basse température. C. Sawas-Dimopoulou et E. Fytizas, 1965.
Schachter, H.
Stabilization of rat liver polyribosomes by endogenous ribonuclease inhibitor. G. R. Lawford and H. Schachter, 144.
The incorporation of ^{14}C-threonine and ^{14}C-glucosamine into subcellular fractions and into bovine submaxillary mucin by slices of bovine submaxillary gland. G. R. Lawford and H. Schachter, 507.
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Oxidatiin of glucose and other substrates by Ehrlich ascites tumor cells. N. Glick, E. Gillespie, and P. G. Scholefield, 1401.
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Antigenicity of 5-hydroxyindole-3-acetic acid, a derivative of serotonin. II. Antibodies specific to 5-hydroxyindoleacetic acid. N. S. Ranadive and A. H. Sehon, 1689.
Antibodies to serotonin. N. S. Ranadive and A. H. Sehon, 1701.
Detection of cells producing antibodies against the dinitrophenyl group. M. N. Layson and A. H. Sehon, 1773.

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Membrane specificity of *Leuconostoc mesenteroides* for the stereoisomeric forms of glycine and valine dipeptides. O. C. Yoder, K. C. Beamer, and D. C. Shelton, 213.

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Siddiqueullah, M.
Biosynthesis of chloramphenicol. II. *p*-Aminophenylalanine as a precursor of the *p*-nitrophenylserinol moiety. M. Siddiqueullah, R. McGrath, L. C. Vining, F. Sala, and D. W. S. Westlake, 1881.

Silah, J.
Procedure for determination of aldosterone in human peripheral plasma by double-isotope derivative assay, and its application for measurement of secretory rate and urinary excretion. W. Nowaczynski, J. Silah, and J. Genest, 1919.

Smallman, B. N.
Lysosomal acid phosphatase during metamorphosis of *Musca domestica* (Linn.). B. M. Hegdekar and B. N. Smallman, 1202.

Smillie, L. B.
The activation of chymotrypsinogen B. I. Factors affecting the generation of chymotryptic activity. C. O. Parkes and L. B. Smillie, 1459.

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The effect of 4-hydroxy-3,5-diidobenzonitrile (ioxynil) on respiratory electron transport in *Vicia faba* L. D. Paton and J. E. Smith, 1891.

Smith, R. E.
Effect of temperature on metabolic rates of liver and brown fat homogenates. J. C. Roberts and R. E. Smith, 1763.

Sommer, S.
Observations on some effects of the sodium salts of certain monocarboxylic acids on established cell lines. D. M. Pace, B. Th. Aftonomos, A. Elliott, and S. Sommer, 81.

Sourkes, T. L.
Intracellular distribution of copper in the liver of the rat. G. Gregoriadis and T. L. Sourkes, 1841.

Spears, D.
Utilization of choline or betaine for phospholipid synthesis in an aerobic marine microbe. H. S. Shieh and D. Spears, 1255.

Spence, M. W.
Gangliosides in developing rat brain. Isolation and composition of subcellular membranes enriched in gangliosides. M. W. Spence and L. S. Wolfe, 671.

Spencer, M.
Ethylene production from β-alanine by an enzyme powder. J. E. Thompson and M. Spencer, 563.

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Effect of various amino acids on the incorporation of ^{14}C-L-leucine in the tissue proteins of normal and dystrophic mice. L. Berlinguet and U. Srivastava, 1985.

Steck, W.
Biosynthesis of scopolin in tobacco. W. Steck, 889.
The biosynthetic pathway from caffeic acid to scopolin in tobacco leaves. W. Steck, 1995.

Stewart, H. B.
The lipids of *Lipomyces lipofer*. F. A. McElroy and H. B. Stewart, 171.
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Further studies on the binding of γ-aminobutyric acid by brain. P. Strasberg and K. A. C. Elliott, 1795.
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The incorporation of α-glycerophosphate-^{32}P into the lipids of rat brain preparations. II. On the biosynthesis of monophosphoinositide. F. Possmayer and K. P. Strickland, 63.
Subba Rao, P. V.
Degradation of aromatic amino acids by fungi. II. Purification and properties of phenylalanine ammonia-lyase from *Ustilago hordei*. P. V. Subba Rao, K. Moore, and G. H. N. Towers, 1863.
Subrahmanyam, D.
Glyceryl ether phospholipids and plasmalogens of filarial parasite *Litomosoides carinii*. D. Subrahmanyam, 1195.
Sullivan, P. D.
Free radicals of biological interest. II. Electron spin resonance (ESR) spectra of 2537 Å irradiated amino acids. W. F. Forbes and P. D. Sullivan, 1831.
Sutherland, L.
Stimulation of incorporation of glucosamine-1-^{14}C into rat plasma glycoproteins after renal damage. M. A. Moscarello, L. Sutherland, and S. H. Jackson, 136.
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Ferrous iron oxidation by *Ferrobacillus ferrooxidans*. Purification and properties of Fe^{++}-cytochrome *c* reductase. G. A. Din, I. Suzuki, and H. Lees, 1523.
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Adenine nucleotides and adenosine triphosphatase activity during aestivation of the Indian apple snail *Pila globosa*. S. Raghupathiramireddy and K. S. Swami, 603.
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Biosynthesis of 11β-hydroxytestosterone and 11-ketotestosterone in the testes of rainbow trout. R. Arai and B. Tamaoki, 1191.
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Analytical studies of rapidly labeled RNA from L cells. T. Tamaoki and B. G. Lane, 2041.
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Fish-muscle purine and pyrimidine nucleoside phosphorylases. H. L. A. Tarr and J. E. Roy, 409.
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Thibert, R. J.
Behavior of α-substituted cystines in a cystathionase system and in a pyridoxal phosphate model system. R. J. Thibert, J. F. G. Diederich, and G. W. Kosicki, 1595.
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Ethylene production from β-alanine by an enzyme powder. J. E. Thompson and M. Spencer, 563.
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The hydrolysis of monophosphoinositide by extracts of brain. W. Thompson, 853.
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Purification of CA-7, a thrombolytic fungal protease. D. A. J. Ives and A. L. Tosoni, 1055.

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Degradation of aromatic amino acids by fungi. II. Purification and properties of phenylalanine ammonia-lyase from *Ustilago hordei*. P. V. Subba Rao, K. Moore, and G. H. N. Towers, 1863.
Tribe, T. A.
Effect of X-radiation of the tryptic digestion of albumin and erythrocyte membrane proteins. D. K. Myers, R. W. Bide, and T. A. Tribe, 1973.
Turcotte, R.
The physicochemical properties of human hemagglutinins to tuberculin purified protein derivative. R. Turcotte, S. O. Freedman, and A. H. Sehon, 1343.
Umaña, R.
Study of some factors that affect the distribution of nuclear volumes in preparations of rat liver nuclei. R. Umaña, 1175.
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Study of the glycerol kinase of *Mycobacterium* 607 by a colorimetric assay procedure. S. V. Pande, R. Parvin, and T. A. Venkitasubramanian, 797.
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Biosynthesis of fusaric acid in cultures of *Fusarium oxysporum* Schlecht. T. A. Dobson, D. Desaty, D. Brewer, and L. C. Vining, 809.
Biosynthesis of chloramphenicol. II. *p*-Aminophenylalanine as a precursor of the *p*-nitrophenylserinol moiety. M. Siddiqueullah, R. McGrath, L. C. Vining, F. Sala, and D. W. S. Westlake, 1881.
Biosynthesis of nicotinic acid by *Fusarium oxysporum* Schlecht. D. Desaty and L. C. Vining, 1953.
von Tigerstrom, M.
Histidyl transfer ribonucleic acid synthetase from bakers' yeast. M. von Tigerstrom and G. M. Tener, 1067.
Wada, J. A.
Distribution of tyrosine hydroxylase activity in adult and developing brain. E. G. McGeer, S. Gibson, J. A. Wada, and P. L. McGeer, 1943.
Wainwright, L. K.
Regulation of the initiation of hemoglobin synthesis in the blood island cells of chick embryos. III. Qualitative studies of the effects of 8-azaguanine and preparations of transfer RNAs. S. D. Wainwright and L. K. Wainwright, 255.
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Regulation of the initiation of hemoglobin synthesis in the blood island cells of chick embryos. II. Early onset and stimulation of hemoglobin formation induced by exogenous δ-aminolevulinic acid. S. D. Wainwright and L. K. Wainwright, 344.
Exploratory studies of the liver glutamic dehydrogenase of the hagfish *Myxine glutinosa*. Lack of regulation of activity by ADP and diethylstilbestrol in a physiological saline. S. D. Wainwright, P. Bright-Asare, and J. C. Campbell, 614.
Regulation of the initiation of hemoglobin synthesis in the blood island cells of chick embryos. V. Qualitative studies of the effects of proflavine. S. D. Wainwright and L. K. Wainwright, 1483.
Regulation of the initiation of hemoglobin synthesis in the blood island cells of chick embryos. IV. Effects of some inhibitors of protein synthesis. S. D. Wainwright and L. K. Wainwright, 1648.

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The influence of tumor growth on the synthesis of α_2-AP (acute phase) globulin of rat serum. H. E. Weimer, C. Humelbaugh, and D. M. Roberts, 1937.

Westlake, D. W. S.
Biosynthesis of chloramphenicol. II. *p*-Aminophenylalanine as a precursor of the *p*-nitrophenylserinol moiety. M. Siddiqueullah, R. McGrath, L. C. Vining, F. Sala, and D. W. S. Westlake, 1881.

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